The Data Tables

The data in this publication have a broad range of applications. They are, however, subject to the limitations discussed in Chapter 1 relating to the need to perform a more detailed examination of underlying factors and data consistency. The statistics in Chapter 2 allow transit agencies to compare their performance more selectively; e.g., by selecting those agencies defined as being within the same peer group by virtue of climate, topography, demographic characteristics of the population served, or factors other than industry averages.

Caution

Some users of the data may tend to overstate the significance of comparisons that are based strictly on data contained in this report. Performance measures obtained using these data should be viewed strictly as tentative indicators of potential areas of improvement. If a specific indicator appears to imply below-average performance relative to industry peers, more detailed analysis is needed to reveal the factors underlying the below average value.

Chapter 2 presents a detailed performance snapshot during a particular period for 516 transit agencies. Since the majority of agencies have reported in prior Report Years, the data can also be used for time-series analyses. Such analyses can contribute to conclusions on the current and evolving conditions and problems of specific transit agencies, and the transit industry as a whole. Time-series analyses, however, must consider two important factors:

1. Beginning with the 1983 report, annual reports were published based on transit agencies' fiscal years, rather than the Federal Fiscal Year period (at that time, July 1 to June 30). See “Special Notes on Reporting and this Annual Report” in Chapter 1 for additional details.
2. Beginning with the 1990 Annual Report, individual transit agency statistics are reported.

Special Notes on the Desegregated Data Tables

Users of these tables should refer to “Special Notes on Reporting and this Annual Report” in Chapter 1 for a better understanding of the data, particularly the discussions of purchased transportation; public and private transit agency identification; vehicles operated in annual maximum service; and questionable data items, to avoid confusion. Especially when performing comparative analyses using previously published reports, users should refer to these sections as well as the discussions of individual tables in this chapter.

Reporting Changes

Through the NTD, FTA has implemented several reporting changes since 1992. The following exhibit summarizes these changes, and should be referred to when undertaking analysis involving two or more Report Years.

Reporting Changes Summary 1995 to 1999

1995 Report Year

- Expanded Safety Data and added Security reporting requirements to the Transit Safety Form (405), which became Transit Safety and Security Form (405)
- Reported Capital Funding Form (103) by type of service (directly operated and purchased transportation)
- Reported Operating Expense Form (301) by type of service (directly operated and purchased transportation(optional))
- Reported Non-Financial Operating Data, by mode and type of service (directly operated and purchased transportation (optional)), for Revenue Vehicle Maintenance and Energy Form (402), Transit Agency Employee Form (404), and Transit Safety and Security Form (405)

1996 Report Year

- Reported the full cost of purchased transportation services, including expenses incurred by the seller when the buyer under the purchased transportation agreement does not pay for the full cost of the service
- Reported cash and non-cash reconciling expenditures at system-wide level
- Reported total operating expense attributable to ADA (Americans with Disabilities Act) compliance requirements for demand response
- Reported annual total number of unlinked passenger trips eligible as ADA trips

1997 Report Year

- Reported purchased transportation expenses by function
- Reported safety and security for purchased transportation

1998 Report Year

- Replaced object classes fare revenues returned to the buyer and fare revenues retained by the seller with purchased transportation fare revenues (Operating Funding Form 203)
- Included operating expenses paid for by capital funds
- Replaced revenue service interruptions (mechanical and other reasons) with revenue system failures for major and minor systems (Revenue Vehicle Maintenance and Energy Form 402)

1999 Report Year

- Included maintenance facilities leased by transit agencies
- Included employee hours for part-time employees

Transit Revenues — Tables 1 through 10

Tables 1 through 10 contain information on types of operating capital funds applied for individual transit agencies. Operating funds applied are reported by transit agency totals, not by individual modes. Table totals are provided for national totals, fleet size, and size of urbanized area; however, these totals vary depending on the number of transit agencies reported.

Also, for these tables the number of vehicles operated in annual maximum service includes those vehicles used for both directly operated and purchased transportation services included under the same transit agency's identification number, as reported on the Transit System Service Form (406). The only exception is Table 8 (Transit Capital Funds Applied), which details data by type of service (directly operated or purchased transportation).

The NTD uses accrual accounting to record financial data; i.e., revenues reported are those that resulted in liabilities for benefits received during the fiscal year, regardless of whether or not payment of the expenditure was made during the reporting period.

Table Descriptions

Transit revenue applied data are presented in the following tables:

Table 1: Transit Operating Funds Applied

Compiled from the Operating Funding Form (203) and reported system wide. The Operating Funding Form (203) incorporates the revenue data by describing the funding sources for operating expenditures, using revenue object classes 401 through 440 (directly generated funds), and the contribution of Federal, state, and local governments' funds to the operating subsidy of transit agencies. The funds reported on this form are not necessarily revenue earned during the reporting period; the funds may include revenue earned in prior reporting periods. Only funds expended (applied) are reported.

This table was changed in 1999 when the object classes for fare revenue retained by seller and fare revenues returned to the buyer were replaced with purchased transportation fare revenues. This new object class includes all fare revenues generated by purchased transportation contracts, regardless of whether they were retained by the seller or returned to the buyer.

Beginning in 1991, object class 402 (special transit fares) was included with object class 401 (passenger fares).

Under the column labeled Directly Generated Funds, Other Revenues include various revenue object classes, including 403 (school bus service funds), 404 (freight tariffs), 405 (charter service funds), and 406 (auxiliary transportation funds), and revenues accrued through a purchased transportation agreement. It also includes contract expenditures incurred net of purchased transportation revenues.

Under Directly Generated Funds, the data in the column labeled Dedicated and Other includes funds dedicated to transit at their source (income, sales, property, gasoline, and other levied taxes as well as bridge, tunnel, and highway tolls). These are fees the transit agency has the legal authority to impose.

The Other Federal Public Funds column details operating funding from sources including the Planning Program, 49 USC 5303; the Research, Development, Demonstration and Training Program, 49 USC 5312; and the Non-urbanized Area Formula Program, 49 USC 5311.

Other changes instituted, beginning with the 1993 Data Tables, affect the public funds subcategories for state and local funds.

3. For state funds, General Revenue was inserted in place of Grants and Reimbursements. However, object class 411 was used for both.
4. Under State Funds, the Dedicated and Other column was changed from Fare Assistance in 1992. Despite the change, both contain object class 412 (state special fare assistance).
5. Under Local Funds, General Revenue replaced Grants and Reimbursements and continued to report object class 409 (local cash grants and reimbursements).
6. Under Local Funds, the Dedicated and Other column changed from Fare Assistance; it continued to report object class 410 (local special fare assistance).

The aggregation of operating funds applied does not include private providers under contract to public agencies if the funds are reported by both entities. This avoids double counting of operating funds applied.

Table 2: Federal Government Sources for Transit Operating Funds Applied

This table provides a breakdown of Federal operating assistance funds by those attributable to urbanized area operating assistance funds and urbanized area capital assistance funds used in operations. In prior years, capitalized operating funds were reported under Capital Funding Applied (Table 6 in 1998).

Tables 3 and 4: State Taxes Dedicated at Their Source for Transit Operating Funds Applied and Local Taxes Dedicated at Their Source for Transit Operating Funds Applied

Tables 3 and 4 were compiled from the Operating Funding Form (203) and state and local taxes, respectively, applied to transit operations. Operating funding from dedicated taxes are desegregated by type of tax (income, sales, property, gasoline, or other). The Other Taxes column includes any other special state or local taxes dedicated at their source to transit operating funding such as payroll and utility taxes.

Table 5: Directly Generated Taxes Dedicated at Their Source for Transit Operating Funds Applied

Table 5 is compiled from the Operating Funding Form (203). This table provides a breakdown of directly generated dedicated taxes, by income, sales, property, gasoline, and other, applied to transit operations.

Table 6: Transit Capital Funds Applied

Data were compiled from the Capital Funding Form (103). Federal sources of assistance are classified either as funds provided under 49 USC 5309, 49 USC 5307, or from other sources. State and local sources are divided into General Revenue and Dedicated. Dedicated sources restrict funds to transportation-related expenditures, while transit must compete with other public programs for general revenues. Dedicated sources of funds are desegregated into taxes (income, sales, etc.) and other (bridges, tunnels, state and local bonds, investment income, etc.).

A reporting change introduced in 1998 required agencies to report capitalized operating funds on the Operating Funding Form (203) and these data are included in Tables 1 and 2. In 1996 this table was changed to include capital data by type of service (TOS), which can be directly operated (DO) or purchased transportation (PT). See “Special Notes” in Chapter 1 for more details on purchased transportation and directly operated types of services. In 1991, a column was included for transit agency funds dedicated at their source. Transit agency funds do not include fare revenues. Transit Agency Funds was changed to Directly Generated Funds beginning in 1992.

Tables 7 and 8: State Taxes Dedicated at Their Source for Transit Capital Funds Applied and Local Taxes Dedicated at Their Source for Transit Capital Funds Applied

Tables 7 and 8 were compiled from the Capital Funding Form (103). Both tables were changed in 1996 to include capital data by type of service. These two tables further desegregate the state and local tax revenue applied for public transit capital that was shown in Table 6.

Table 9: Directly Generated Taxes Dedicated at Their Source for Transit Capital Funds Applied

Data were compiled from the Capital Funding Form (103). Collection of these data was also a new reporting requirement. This table provides a breakdown of directly generated dedicated taxes by income, sales, property, gasoline, and other applied for transit capital. In 1996, this table was changed to include capital data by type of service.

Table 10: Capital Funds Applied by Type of Expenditure

Data were compiled from the Capital Funding Form (103). Table 10 provides a breakdown of the capital funds applied and how they were used. Mode and type of service for three primary categories provide data: rolling stock, facilities, and other. Aggregate totals for each mode and type of service reported by a transit agency are also provided. This table was changed to include capital data by type of service in 1996.

Potential Data Applications

Tables 1 through 10 summarize the magnitude and source of transit funds applied for individual transit agencies. The data in these tables permit analyses of the extent to which specific agencies recover operating expenses from fares, as well as the extent to which they rely on various sources of directly generated, local, state, and/or Federal assistance to apply to their operation.

Transit agencies can use these data to compare the types of funds applied and the percentage distributions of their sources to those of other agencies. In general, the data permit cross-sectional and time-series analyses, but more specifically they allow analysts to examine individual agencies and to custom-define peer groups. For example, peer groups could be formed based on mode, fleet size, annual operating expenses, or other factors not contained in this report, such as climate and collective bargaining agreements. Comparisons can then be made to the individual transit agencies in the group averages.

Transit Expenses — Tables 11 through 14

Operating Expenses are reported using accrual accounting and reported in the year they were incurred. This is the year in which they result in liabilities for benefits received, regardless of whether payment is made during the reporting period.

Tables 11 through 14 contain information on the types and amounts of expenses incurred by individual transit agencies. Transit expenses are reported by function and by object class. The number of vehicles operated in annual maximum service include those vehicles used for both directly operated (DO) and purchased transportation (PT) services included under the same transit agency's identification number, as reported on the Transit System Service Form (406).

Functional classes divide operating expenses into four major categories or functions: vehicle operations (VO), vehicle maintenance (VM), non-vehicle maintenance (NM), and general administration (GA). Analysis of expenses by function must be qualified by the degree to which transit agencies uniformly allocate expenses among these categories. This analysis should include careful consideration of reporting limitations as well as detailed accounting practices at the specific transit agencies examined.

Expenses by function were reported for both DO and PT services beginning in 1997.

Object classes divide operating expenses into categories such as labor, fringe benefits, services, and materials and supplies, among others.

While revenue data are summarized for all modes operated by a transit agency, the expense data are desegregated by mode. Beginning in 1992, multi-modal transit agencies must fully allocate expenses to the appropriate modes for each of the various functional categories.

The operating expenses summarized in these tables exclude reconciling items (e.g., interest expenses, leases and rentals, and depreciation). Reconciling items are reported only as agency totals and are not desegregated by mode or functional class. Reconciling items are required to provide an overall total that is consistent with the total operating funding applied (Tables 1 through 5) and with published reports. These expenses are reported separately because local accounting practices for handling such items (particularly depreciation and amortization) differ widely. Generally, analysts using these data exclude reconciling items from operating expenses. Although this actually understates true operating costs, it resolves the problems inherent with inconsistent treatment of reconciling items.

Table Descriptions

Transit expense data for individual transit agencies are summarized in the following tables:

Table 11: Transit Operating Expenses by Mode and Function

Compiled from the Operating Expenses Form (301), for each reported mode.

Because purchased transportation expenses for agencies contracting more than 100 vehicles in maximum service distort the financial data associated with service directly operated by a transit agency, object class 508.02 (purchased transportation filing separate report) has been subtracted and presented in a separate column. Beginning in 1997, object class 508.01 (purchased transportation in report) has been reported by functional category.

Before 1997, these expenses were collapsed under the column Purchased Transportation In Report.

Object classes 508.01 and 508.02 reflect the full cost of purchased transportation services except in cases where part of the funding for the purchased service is provided by the seller(s). Object classes 508.01 and 508.02 include:

- Contract expenditures by the buyer (net of purchased transportation fare revenues)
- Purchased transportation fare revenues
- Other costs incurred by the buyer such as contract administration, marketing, etc.

In cases of purchased transportation involving 100 or more vehicles operated in annual maximum service, expense data are reported twice: by the contracting agencies (buyer) as a purchased transportation expense (under object class 508.02), and by the contract provider (seller), by function and object class, if the seller is not a brokerage system. Brokers report separately if the purchased transportation agreements involve more than 100 vehicles operated in maximum service, but their expenses are lumped under object class 508.01 and are detailed by function.

In general, expenses reported under object class 508.02 are greater than expenses reported by the seller(s) due to contract costs incurred by the buyer as well as profit made off the transaction by the seller(s).

The summarization of operating expenses by UZA size, mode, and vehicle group totals is calculated by totaling all columns, except object class 508.02. This is to avoid double counting of data when operating expenses are aggregated.

Table 12: Transit Operating Expenses by Mode and Object Class

Compiled from the same forms as Table 11. Object class categories correspond to those reported on the Operating Expenses Form (301).

501.01	Operators' salaries and wages
501.02	Other salaries and wages
502	Fringe Benefits
503	Services
504.01	Fuel and lubricants
504.02	Tires and tubes
504.99	Other materials and supplies
505	Utilities
506	Casualty and Liability Costs
508.01	Purchased transportation (in report)
508.02	Purchased transportation (filing separate report)

In addition, 507 (Taxes) and 509 (Miscellaneous Expenses) are included as Other. A separate column showing 510 (Expense Transfers) is included in this table. Until 1995 expense transfers were included as other expenses. Double counting of operating expenses exists in this table for a limited number of transit agencies (See discussion about object classes 508.01 and 508.02 above for Table 11). The summarization of operating expenses by UZA size, by mode, and vehicle group totals is calculated by summing all columns except purchased transportation filing a separate report (object class 508.02). This is to avoid double counting of data when operating expenses are aggregated.

Table 13: Transit Operating Expenses by Function and Object Class — Bus Only Agencies

This table is included because 17.2 percent of the reporting transit agencies operate only bus services. For the 1999 Report Year, 82 transit agencies operated only bus service. Of these, 21

received a reporting exemption. Data are cross-classified by major functional and object classes as per Table 12).

The summarization of operating expenses by UZA size, by mode, and vehicle group totals is calculated by totaling all columns except object class 508.02 (Purchased Transportation – filing separate report). This is to avoid double counting of data when operating expenses are aggregated.

The total number of buses operated in annual maximum service includes those buses used for both directly operated services and for purchased transportation services. The totals are included under the same transit agency's identification number as reported on the Transit System Service Form (406) by type of service for the bus mode.

Table 14: Employer-Paid Fringe Benefits

Data are derived from the Fringe Benefits Form (331). The information presented represents agency totals, because categories of fringe benefits payments are not reported by mode. This form is not required for transit agencies with 100 or fewer vehicles operated in annual maximum service.

Potential Data Applications

The expense tables summarize the costs of operating individual transit agencies. Data are desegregated into mode, function, and object classes. These data can be used to compare costs among various transit agencies and to determine potential areas for improvement. As discussed in Chapter 1, such analysis should incorporate careful examination of all causal factors underlying these differences. This examination can require information beyond that which is obtainable from this reporting system.

Non-Financial Operating Data — Tables 15 through 29

Tables 15 through 29 contain non-financial operating data for individual transit agencies. All the tables include data only for directly operated services, except for Tables 16 and 22 through 27.

Transit Maintenance, Safety, and Security

Table 15 summarizes the number of revenue system failures. Analyzing data from this table generally requires additional data, such as vehicle miles. Through 1998, data for maintenance facilities owned by transit agencies were included in this table; however, beginning with the 1999 Report Year that data has been moved to Table 16 — Maintenance Facilities.

Starting in 1998, the reporting of revenue service interruptions for mechanical and other reasons was changed to revenue system failures for major and minor systems. Each of these categories (major and minor) was broken down by subcategories: Completes Trip and Does Not Complete Trip.

Major system failure is defined the same as the previous definition of interruptions for mechanical reasons (1997 and prior years). Such failures require assistance from someone other than the revenue vehicle operator(s) to restore the vehicle to an operating condition, and they usually prevent the vehicle from continuing in revenue service. Major system failures include malfunctions in:

- air conditioning
- brakes
- doors
- engine cooling systems
- steering and front axle
- rear axle and suspension
- torque converters
- similar major mechanical items.

Minor system failures in general do not usually prevent the vehicle from continuing in revenue service. Minor system failures are the same as interruptions due to other reasons (1997 and prior years) and include:

- fareboxes
- wheelchair lifts
- air conditioning systems
- similar minor mechanical items.

Despite this reporting change, the interpretation of what constitutes a system failure is also subject to individual transit agencies' policies and procedures. System failure figures should be viewed as gross indicators. Analysis of system failures as measures of maintenance performance should be undertaken with caution, requiring detailed examination of how system failures were defined and the individual agencies' policies for taking vehicles out of service. Application of data over time is also relevant in determining trends and conducting further analysis.

In 1999 data was collected on maintenance facilities leased by transit agencies in addition to facilities owned by transit agencies, as reported in prior years.

Table 16 summarizes transit facilities based on the number of vehicles assigned to the facility. In addition, two classifications of facilities are defined for general-purpose use and heavy maintenance work. A general-purpose facility is the most commonly reported facility, because it provides running repairs, servicing, and vehicle storage as well as component repair and overhaul. By comparison, a heavy maintenance facility is one wholly dedicated to component repair and overhaul, and usually only the larger transit agencies have such a facility.

The number of vehicles assigned to a facility will vary depending on its size (capacity) and the number of modes operated by the agency. Also, unique geographical features and/or constraints that may make it more economical to operate more than one facility to support a small fleet of vehicles may result in a greater number of facilities being reported for the transit fleet than would normally be required. Many transit agencies are operating multi-modal service (e.g., bus and demand response systems), and in such cases the facility is required to be allocated among the modes using the facility. For example, if a transit agency reports 100 total vehicles, of which 70 are buses and 30 were demand response, it would allocate the facility as .7 for bus and .3 for demand response. When relatively small transit agencies report multiple facilities, one needs to consider some of the factors mentioned above and whether or not a proper allocation was performed.

Transit safety and security data are compiled from the Transit Safety and Security Form (405). Reporting requirements for safety data were expanded in 1995 with the addition of fatalities and injuries for patrons, employees, and others for each safety item, such as collisions and non-collisions (derailments, personal casualties and fires). Additionally, new items for personal casualties were added.

Reporting requirements were expanded in 1997 with the inclusion of safety and security data for purchased transportation. Reporting of security data commenced with the 1995 Report Year, with only agencies serving urbanized areas (UZAs) with greater-than 200,000 populations required to report. Data are reported by mode and summarized using the FBI Uniform Crime Reporting (UCR) Program criteria. The definitions used in Form 405 are from the FBI Uniform Crime Reporting Handbook, 1984.

Transit Way Mileage

Directional route miles are reported on the Transit Way Mileage Form (403) and presented in Tables 18 through 20. The term “directional route miles” is defined as the mileage in each direction over routes that public transportation vehicles travel while in revenue service. Directional route miles are a measure of the facility or roadway, not the amount or frequency of service carried on the facility; i.e., number of routes or vehicle revenue miles. They are determined by direction of service, but not by the number of traffic lanes or rail tracks existing in a given right-of-way. If vehicles travel in only one direction within a right-of-way, each mile is counted once. If vehicles travel in both directions, each mile is counted twice. A mile of single track over which commuter rail service operates in both directions represents two directional route miles. The number of routes along the measured distance does not influence directional mileage; e.g., a mile of exclusive busway on which a transit agency operates six different routes in only a single direction represents one directional mile.

Tables 18 through 20 contain data for directly operated service only, as their titles indicate. Other annual publications (*Transit Profiles, National Transit Summaries and Trends*) report directional route miles for both directly operated and purchased transportation modes.

Service Supplied and Service Consumed Data

Service supplied data include vehicle miles, vehicle revenue miles, vehicle hours, and vehicle revenue hours. Beginning in 1984, transit agencies were asked to indicate both their scheduled and actual vehicle revenue miles of service. The purpose of adding scheduled vehicle revenue miles of service is to allow a transit agency to indicate whether it may have more or less service than was originally scheduled or

planned. The difference between vehicle miles and vehicle revenue miles represents deadheading. Definitions of the above data terms can be found in the Reporting Manual Glossary.

Service consumed data refer to ridership information (measures of use of the service supplied) and include unlinked passenger trips and passenger miles.

Passenger mile data are normally collected through sampling because it is usually not part of a transit agency's routine operations and is among the most difficult to collect. While FTA has developed several such techniques, transit agencies were allowed to use self-certifying sampling techniques beginning with the 1990 Report Year. Regardless of the sampling technique used, it must satisfy precision and confidence level requirements of 10 percent and 95 percent, respectively.

Service supplied and service consumed data are reported on the Transit System Service Form (406); data are reported in terms of average weekday, average Saturday, and average Sunday.

Table Descriptions

Non-financial operating data are provided in the following tables. For multi-modal agencies, data are desegregated by individual modes.

Table 15: Revenue Vehicle Maintenance Performance

Data were compiled from the Revenue Vehicle Maintenance Performance and Energy Consumption Form (402). The number of vehicles operated in annual maximum service are for those vehicles used for directly operated services only, as reported on the Transit System Service Form (406).

For 1999, maintenance facilities data have been moved to the new Table 16 in order to accommodate the requirement for reporting maintenance facilities owned and leased.

Table 16: Maintenance Facilities

Data were compiled from the Revenue Vehicle Maintenance Performance and Energy Consumption Form (402). The number of vehicles operated in annual maximum service represents those vehicles used for directly operated and purchased transportation services.

This table includes data for maintenance facilities owned and leased by transit agencies.

Table 17: Energy Consumption

Data for this table were compiled from the Revenue Vehicle Maintenance Performance and Energy Consumption Form (402). The number of vehicles operated in annual maximum service are for those vehicles used for directly operated services only as reported on the Transit System Service Form (406).

The table was expanded in 1995 with the inclusion of kerosene and grain additive fuel. However, only 2 agencies reported these fuel types in 1999; therefore, they were collapsed under Other Fuel. Fuel types reported are used for revenue vehicles only.

Tables 18 through 20: Transit Way Mileage

Data were compiled from the Transit Way Mileage Form (403), directly operated service only. For an explanation of directional route miles, see the above section on transit way mileage.

Tables 18 through 20 display transit way mileage in three separate groups: non-rail, ferryboats, and rail. This separation provides for easier comparison of like modes and reduces the number of unnecessary blank entries. By law, all directional route mileage for ferryboat and trolleybus modes is classified as exclusive for reporting purposes.

Table 21: Transit Agency Employee Work Hours and Person Count

In 1999, employee work hours were broken down into full-time and part-time employee categories. In prior years, only total work hours were reported. As a result, in the column headed Mode the mode code will be followed either by a lower-case "f", indicating full-time employees, or a lower-case "p", indicating part-time employees.

Data were compiled from the Transit System Employee Form (404). Data are collected on this form for both employee work hours and an actual person count at fiscal-year end. Fractional entries for actual person counts result from the fact that in cases where employees work for more than one function, mode, or type of service, the actual person count is prorated among labor classifications and modes by type of service. When working on capital projects, an employee's labor is considered a capital expense; otherwise, it is an operating expense.

Some care is required for analyses of the data presented in this table. Work hours cover the entire Report Year, whereas person counts are based on those employed on the last day of the Report Year. This may distort the annual average number of hours per employee.

While many transit modes are labor intensive, others are not. Due to the unique characteristics of their operations, some modes such as vanpool do not always provide complete employee-related data. Another reporting anomaly sometimes occurs when transit agencies providing directly operated service use contractual services for a portion of the service provision. In these situations, labor is either not reported for an activity (e.g., vehicle maintenance) or only reported for the labor that is engaged in activities associated with the contract services. As a result, labor is understated and, when reported within a directly operated report, can create misleading information. Examples of how this occurs include: transit agencies acquiring operating labor through a purchased transportation arrangement; maintenance services performed by another municipal entity like a public works department; specific management services performed by a management services company. When zero and/or low values are reported within a directly operated report, caution should be exercised in the use of employee-related data.

Transit Safety

Data were compiled from the Transit Safety and Security Form (405). Reporting requirements for safety data were expanded in 1995 with the addition of fatalities and injuries to patrons, employees, and others for each safety item, such as collisions and non-collisions (derailments, personal casualties and fires). New items were also added for personal casualties.

In 1997, reporting safety and security data for purchased transportation became mandatory.

New data requirements frequently result in some data anomalies due to reporting misunderstandings and incorrect applications by transit agencies. The data can also be impacted by agencies requesting data waivers.

Safety data are presented in Tables 22 through 24. In each table, the number of vehicles operated in annual maximum service represent those vehicles used for both directly operated and purchased transportation services, as reported on the Transit Agency Service Form (406).

Table 22: Transit Safety: Number of Incidents — Collisions, Non-Collisions, and Total Property Damage

This table includes data related to incidents and total transit property damage. An “incident” is defined as an unforeseen occurrence that results in collision, derailment, personal casualty, non-arson fire, or property damage exceeding $1,000 associated with transit agency revenue vehicles, maintenance areas, and rights-of-way. Incidents are divided into two main categories: Collisions and Non-Collisions. For collisions, the total number of incidents involving collisions with other vehicles, objects, and people is presented in addition to the total number of collisions at grade crossings, as well as attempted/successful

suicides. For non-collisions, incidents related to derailments, personal casualties, and non-arson fires are included.

Table 23: Transit Safety: Number of Fatalities — Collisions and Non-Collisions

This table presents fatalities related to collisions and non-collisions. A "fatality" is defined as a death confirmed within 30 days after an incident that occurs under the Collision, Derailment, Personal Casualty, or Non-Arson Fires categories. In this table, for each category of collisions and non-collisions, the number of fatalities involving patrons and non-patrons (employees and others) is presented.

Table 24: Transit Safety: Number of Injuries — Collisions and Non-Collisions

This table presents injuries related to collisions and non-collisions as in the previous table. "Injury" is defined as any physical damage or harm to a person requiring medical treatment, or any physical damage or harm to a person reported at the time and place of occurrence. For each category of Collisions and Non-Collisions, the number of injuries involving patrons and non-patrons (employees and others) is presented.

Transit Security

Data were compiled from the Transit Safety and Security Form (405). Only agencies serving urbanized areas (UZAs) in excess of 200,000 population must report on transit security data. The reporting of security data commenced in the 1995 Report Year.

Data are reported by mode and type of service and summarized according to the FBI Uniform Crime Reporting (UCR) Program criteria. The definitions below are taken from the FBI Uniform Crime Reporting Handbook, 1984. Data for transit security are divided into two categories: Part I — Offenses (Reports) and Part II — Offenses (Arrests). The first category includes serious crimes against persons, such as homicide, forcible rape, robbery, and aggravated assault. These offenses are reported based on records of calls for assistance, complaints, and/or investigations. Part I also includes crimes against property, such as larceny/theft, motor vehicle theft, burglary, and arson.

The second category involves less serious crimes, and offenses are reported based on arrests made. For each crime, data are presented by mode and type of service.

Security data are presented in Tables 25 through 27. In each table, the number of vehicles operated in annual maximum service represent those vehicles used for both directly operated and purchased transportation services, as reported on the Transit Agency Service Form (406).

Table 25: Transit Security: Part I — Offenses (Reports) Violent Crime

Table 25 presents data for violent crime (crimes against persons). For each reported crime, the total (in vehicle plus in station plus other transit property) for patrons, employees, and others is included. The data are presented by mode and type of service for transit agencies serving UZAs in excess of 200,000 population.

Table 26: Transit Security: Part I — Offenses (Reports) Property Crime

Table 26 presents data for property crime. As in Table 24, for each reported crime the total number of reports for patrons, employees, and others is included. The data are presented by mode and type of service for transit agencies serving UZAs in excess of 200,000 population.

Table 27: Transit Security: Part II — Offenses (Arrests) and Transit Property Damage

Table 27 presents data for less serious crimes and are reported based on arrests made. Data are presented by mode and type of service. Additionally, the total transit property damage is included.

Transit Service

Table 28: Transit Operating Statistics: Service Supplied and Service Consumed

This table summarizes transit agency service supplied and service consumed data. Data were compiled from the Transit System Service Form (406) for directly operated and purchased transportation service.

Vehicles Available for Maximum Service represent the total annual active service fleet and include spares, out of service vehicles, and vehicles in or awaiting maintenance. They do not include vehicles being held for sale, emergency contingency use, etc. If the total active fleet for a given mode varies during the year, the reported figure represents the same time period as that used to report Vehicles Operated in Maximum Service. Thus, the difference between vehicles available for annual maximum service and vehicles operated in annual maximum service can be used to compute a transit agency's spare ratio. See Chapter 1 for further details on vehicle data.

With regards to demand response (DR), jitney (JT), publico (PB), and vanpool (VP) modes, data for the column Annual Scheduled Vehicle Revenue Miles have been zeroed. By definition, these modes do not have scheduled service.

Vehicle Inventory

Table 29: Age Distribution of Active Revenue Vehicle Inventory

Data are compiled from the Revenue Vehicle Inventory Form (408) for directly operated services only. Vehicle Type and Active Vehicles by Age Grouping show data in the total active fleets. Vehicle type codes are listed in Chapter 1. The age of a vehicle is considered to be the number of years since its date of manufacture.

The National Transit Database reporting system is based on a transit agency's fiscal year. Over 60 percent of all transit agencies reporting complete their respective fiscal year before the end of a calendar year. As a result, a revenue vehicle manufactured, delivered, tested, and accepted by a transit agency after the fiscal-year end but within the calendar or manufacturer year will not be reported until the next Report Year.

Potential Data Applications

The data presented in Tables 15 through 29 can be used to help answer questions regarding service provided by individual transit agencies relative to the investment required. For example, how many employees, how much fuel, and how many vehicles were required to provide that service; how safe was that service; and how much use was made of the service by transit patrons.

Performance Indicators

Tables 30 through 33 contain selected performance indicators for individual transit agencies. These indicators are not reported directly, but are computed from other reported data. Usually, these relate measures of service outputs to measures of resource inputs such as vehicle revenue miles per operating expense, and service outputs to service consumption such as vehicle revenue miles per unlinked passenger trip. Performance measures are computed separately for each mode, and therefore should utilize only data items reported on a modal basis (revenues and reconciling expenses are excluded).

Many performance indicators can be computed from these data and other sources. Users should note the limitations relating to analyzing any performance indicators, and carefully examine underlying or causal factors in greater detail. Added to these limitations are data waivers and/or exemptions granted to reporters due to reporting burden, initial report submission, unique circumstances, and other factors. The combinations of these limiting factors may compound interpretation and use of individual performance indicators for a particular mode and type of service.

Potential for distortion exists if only one or two performance indicators are viewed in isolation. For example, the single measure operating expense per unlinked passenger trip might be misleading for a transit agency with a disproportionately high number of transfers (caused, for example, by geographical or routing constraints).

In addition, users of these performance indicator data are advised that similar performance indicators derived from other 1999 publications may contain different values when comparisons between reports are made. This is applicable in cases where a ratio is computed using purchased transportation data, while the performance indicators presented in the publication are for directly operated service only.

Transit Performance Indicators — Tables 30 through 33

Data were derived using the Operating Expenses Form (301), the Revenue Vehicle Maintenance and Energy Form (402), the Transit Way Mileage Form (403), the Transit System Employee Form (404), the Transit Safety Form (405), and the Transit System Service Form (406).

Tables 30 through 33 are comprised of data for directly operated service only.

Table Descriptions

Table 30: Details by Transit Agency Directly Operated Service — Service Supplied Ratios

Table 30 includes ratios that relate variables of service supplied such as vehicle revenue miles and hours. It also presents data on peak-to-base ratio, with the inclusion of peak- and base-period vehicles.

Table 31: Details by Transit Agency Directly Operated Service — Cost Efficiency and Cost Effectiveness

Table 31 includes ratios related to cost efficiency (the link between service inputs and service outputs), such as operation expense per revenue hour and operating expense per vehicles operated in maximum service. It also includes ratios related to cost effectiveness (the link between service inputs to service consumption), such as operating expense per unlinked passenger trip and operating expense per passenger mile.

Table 32: Details by Transit Agency Directly Operated Service — Service Consumption per Service Output Ratios and Miles per Vehicle Maintenance Expense

Table 32 measures service effectiveness (the link between service outputs and service consumption). It presents ratios such as unlinked passenger trips per vehicle revenue mile and passenger miles per vehicle revenue hour.

Table 33: Details by Transit Agency Directly Operated Service — Employee Work Hour per Vehicles Operated in Maximum Service

Table 33 presents ratios of employee work hours by function per vehicles operated in maximum service. The table serves as a measure of service efficiency.